

U.S. Application No. 09/632,200
Reply to Office Action dated December 15, 2005

PATENT
450100-02634

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the remarks herein.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1, 3-5, 8-20, and 22 are pending in this application. Claims 1 and 22 are independent.

II. REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1, 3-5, 14-16, and 22 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,612,933 to Iso et al. (hereinafter, merely "Iso") in view of U.S. Patent No. 6,075,668 to Chainer et al. (hereinafter, merely "Chainer").

Claims 8-13 and 19-21 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Iso in view of Chainer and further in view of U.S. Patent No. 6,658,202 to Battaglia et al. (hereinafter, merely "Battaglia").

Claims 17 and 18 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Iso.

As understood by Applicants, Iso relates to reproducing recorded information with error detection and correction processing. A control device switches a reproduction operation to a standard speed mode in response to a correction failure condition generated in a quadruple speed mode. As understood by Applicants, the apparatus disclosed in Iso continues to perform error processing, regardless of the time required.

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As understood by Applicants, Chainer relates to a method and apparatus for correcting random errors in timing pattern generation. Specifically, Chainer discloses improvements in placement of timing patterns in self servo-writing including correcting for random errors. Random errors may be caused by variations in disk velocity and therefore, one technique for correcting for random errors includes reducing velocity jitter. Additionally, random errors can be corrected by improving interval control during the propagation of trigger patterns used in writing timing information on storage media. Further, random errors, in the writing of timing information, can be corrected during a single revolution of the storage media.

As understood by Applicants, Battaglia relates to battery powered device for transferring data between removable memory modules.

III. RESPONSE TO REJECTIONS

Applicants respectfully submit that (A) the applied combinations of Iso, Chainer, and Battaglia do not teach that error processing is performed dependent on the time duration for error processing as claimed in independent claims 1 and 22; (B) that the applied combinations teach away from the claimed invention; and (C) that the applied combinations are improper because they lack motivation and rely on impermissible hindsight reasoning.

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A. Applied combinations do not teach error processing dependent on the time duration

Claim 1 recites, *inter alia*:

A disk drive apparatus containing a plurality of operation modes, comprising:

...

a third mode having the first data rate and error processing for a second data reliability dependent on the time duration for error processing; and

a fourth mode having the second data rate and error handling for the second data reliability dependent on the time duration for error processing,

...

wherein the first data reliability is higher than the second data reliability. (Emphasis Added)

The cited portions of Iso, Chainer, and Battaglia do not disclose or suggest that error processing is carried out dependent on the time duration for error processing in the third and fourth modes, as recited in claim 1. That is, the applied combination does not provide a mechanism for error handling time-out in the case of processing continuous real-time data (i.e., AV data). The Office Action concedes on page 3 that Iso "fails to specifically disclose that a mode having data rate and error processing for the data reliability dependent of time duration." The Office Action relies on Battaglia (col. 10, lin. 1-54) for a teaching of this missing feature. Unfortunately, Applicants respectfully submit that Column 10 of Battaglia fails to teach the recited feature of claim 1. Column 10, and Battaglia in general, deal with correcting random errors due to velocity jitter of a drive and the like. There is no suggestion or motivation that error processing is carried out dependent on the time duration for error processing, as recited in claim 1.

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B. Applied combinations teach away from the claimed invention

Furthermore, Applicants respectfully submit that MPEP §2141.02 (VI) states that

“A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).” (Emphasis added)

Indeed, as stated previously, Applicants respectfully submit that Iso teaches away from error processing dependent on a time duration for error processing, as recited in claim 1.

More specifically, Iso performs “retry processing several times in the quadruple speed mode and if an error correction failure flag still persists, the reproduction mode is switched to the standard speed and the retry processing is carried out again” (col. 4, lin. 20-26, emphasis added).

Additionally, “if the digital signal processing circuit finds an error uncorrectable, three retries, for instance, are carried out in the same quadruple speed mode. If the error is still uncorrectable, the reproduction operation is changed to standard speed mode. Then, the retry is carried out at the standard speed and if three retries fail to correct the error, a correction failure processing is done...” (col. 9, lin. 30-42) This description clearly reveals that error processing is done a fixed number of times regardless of the time required. In contrast, claim 1 provides operation modes “with error handling dependent on the time duration for error processing” (emphasis added).

Additionally, Applicants respectfully submit that Figure 4 of Iso shows that the apparatus of Iso stops error processing after a fixed number of retries (i.e., four). Applicants respectfully submit that this teaches away from operation modes “with error handling dependent on the time duration for error processing,” as recited in claim 1 (emphasis added).

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C. Applied combinations lack motivation and rely on impermissible hindsight

Finally, Applicants respectfully submit that MPEP §2143.01(III) states that

“The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)”
(Emphasis added)

Applicants respectfully submit that the Office Action has failed to provide a suggestion or motivation to combine the teachings of Iso and Chainer, and to further modify that combination as allegedly suggested by Battaglia. Indeed, Applicants respectfully submit there is no motivation anywhere in the art of record to suggest the applied combination. Since there is no motivation in the references themselves, the Office Action has relied on impermissible hindsight to create a mosaic of features from the prior art in a futile attempt to create a vague resemblance of Applicant's claimed invention.

D. Conclusion

In conclusion, (A) the applied combinations of Iso, Chainer, and Battaglia do not teach that **error processing is performed dependent on the time duration for error processing** as claimed in independent claims 1 and 22; (B) that the applied combinations teach away from the claimed invention; and (C) that the applied combinations are improper because they lack motivation and rely on impermissible hindsight reasoning.

Therefore, for all the reasons stated above, Applicants respectfully submit that claim 1 is patentable.

For reasons similar, or somewhat similar, to those described above, independent claim 22 is also patentable.

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IV. DEPENDENT CLAIMS

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

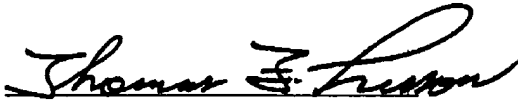
In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate the portion, or portions, of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicants

By 

Thomas F. Presson
Reg. No. 41,442
(212) 588-0800